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Notice of Allowability

Application No.

10/786,207

Examiner

Jeffrey Sharp

Applicant(s)

BLATZ, THOMAS

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/08/2005.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Alex Zinchuk on 28 September 2005.

The application has been amended as follows:

Claims 1-13 have been replaced in their entirety with the following (clean version):

1. A quick nut for positive friction locking a disc-like tool (2) to an external thread (3) of an axially extending working spindle (4) driven about an axis of rotation (A), said nut having an axially extending inner-threaded part (5) encircling said axis of rotation (A) for engagement with said external thread (3), a manually displaceable tensioning means (6, 6', 6'') encircling said axis of rotation (A) and movable axially relative to said inner threaded part (5) between a clamping position and a release position relative to said tool (2), and a spring structure encircling said inner threaded part (5) comprising at least one leaf spring (7) extending generally parallel to the axis of rotation (A) and being bowed in an axial direction in said release position, said at least

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one leaf spring being deflectable in the clamping position by said tensioning means into a flat leaf spring in an axial direction and having first and second axially spaced ends, said first end being mounted in a stop (8) and said second end being mounted in said inner threaded part (5).

2. A quick-lock nut as set forth in Claim 1, wherein said stop (8) is a separate axially displaceable stop (8) extending axially relative to said inner threaded part (5).

3. A quick-lock nut, as set forth in claim 2, wherein said inner threaded part (5) is in part cylindrical in the axial direction and extends towards said stop (8), said stop (8) having a circular annular form.

4. A quick-lock nut, as set forth in claim 1, wherein said at least one leaf spring comprises multiple leaf springs (7) distributed in a circumferential arrangement encircling said axis of rotation (A).

5. (Currently amended) A quick-lock nut, as set forth in claim 1, wherein said at least one leaf spring (7) has a uniform flat zone of elasticity (9').

6. (Currently amended) A quick-lock nut, as set forth in claim 5, wherein said at least one leaf spring (7) has a uniformly flat circular cylinder sleeve segment strip forming the zone of elasticity (9).

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7. (Currently amended) A quick-lock nut, as set forth in claim 6, wherein said at least one leaf spring (7) is displaceable in a radial generally perpendicular direction relative to the axial direction of said spindle (4).

8. (Currently amended) A quick-lock nut, as set forth in claim 7, wherein one of said axial stop (8) and said inner threaded part (5) has a radially outwardly extending radial stop (10), and said manually displaceable tensioning means (6) forms a radially inwardly oriented stop (11) for said at least one leaf spring arranged therebetween.

9. (Original) A quick-lock nut, as set forth in claim 8, wherein said tensioning means (6) is formed as a sleeve manually displaceable in the direction of the axis of rotation (A).

10. (Original) A quick-lock nut, as set forth in claim 5, wherein the zone of elasticity (9') extends circumferentially of said axis of rotation.

11. (Currently amended) A quick-lock nut, as set forth in claim 10, wherein one of said stop (8) and said inner threaded part (5) comprises a tangential stop (14) and said manually displaceable tensioning means (6) has an opposing tangentially oriented counter tangential stop (15), with said at least one leaf spring (7) arranged therebetween.

12. (Currently amended) A quick-lock nut, as set forth in claim 10, wherein said manually displaceable tensioning means (6") forms a tangentially oriented tangential stop (14) with an

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opposing tangentially oriented counter tangential stop (15), with said at least one leaf spring (7) arranged in openings (13) therebetween.

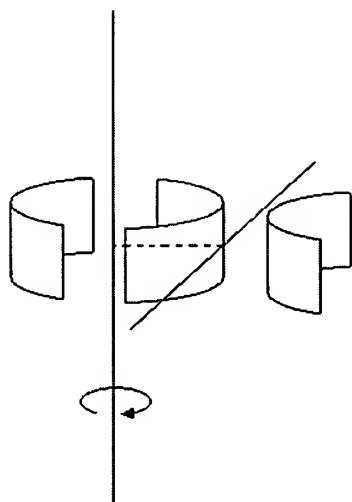
13. (Currently amended) A quick-lock nut, as set forth in claim 11, wherein said manually displaceable tensioning means (6, 6") is formed as a manually axially displaceable cage.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

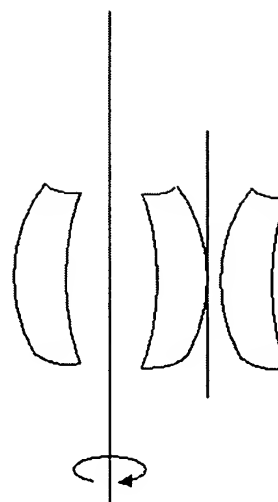
Although the prior art of record suggests leaf springs bowed with respect to a tangent of the axis of rotation (e.g., figure 1a below and DE 10002283 A1), it does not appear to suggest leaf springs bowed in an axial direction along the axis of rotation (figure 1b below).

Furthermore, the prior art of record does not fairly suggest an "initially bowed" leaf spring in a release position, and a "flat" leaf spring in a clamping position.



**Bowed with respect to a
tangent of the axis of
rotation (prior art)**

(1a)



**Bowed in an axial direction,
parallel to the axis of rotation
(present invention)**

(1b)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached on 5:30 am - 4:00 pm Mon-Thurs..

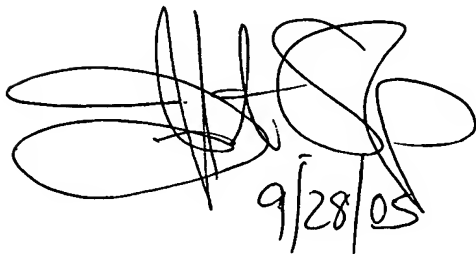
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS


ROBERT J. SANDY
PRIMARY EXAMINER


9/28/05